

## **ABSTRACT OF THE DISCLOSURE**

A method of and apparatus for detecting diseased tissue based upon infrared imaging in two different bands of infrared wavelengths is described. The use of two series of infrared images taken in two different bands of infrared wavelengths increases sensitivity to the subtle temperature changes caused by diseased skin and tissue, especially in the case of cancerous tissue. By sensing skin temperature, the homogeneity thereof, the time variations thereof and the correlation between the two series of infrared images, the present invention decreases the rate of false positives and false negatives. The increased discrimination due to two series of infrared images allows for reliable detection of diseased or cancerous tissue even in the presence of skin tone variations such as birthmarks, tattoos and freckles. The present invention finds special application in the field of breast cancer detection where subtle skin temperature variations may readily be sensed using two series of infrared images.